

Claims

1. A computer usage monitoring utility comprising means for operating as a background application transparently to a user to capture usage data indicating usage of the computer, wherein the utility comprises means for automatically determining a productivity classification for each used application identified in the usage data.
2. A computer usage monitoring utility as claimed in claim 1, wherein the utility comprises means for recording an event for each application used by a user and for applying a productivity classification for each event.
3. A computer usage monitoring utility as claimed in claim 2, wherein the utility accesses a classification table in which a productivity classification is allocated to application groups, to applications, and to window text keywords.
4. A computer usage monitoring utility as claimed in claim 3, wherein the utility comprises means for attempting to classify productivity in sequence according to application group, application, and keywords.
5. A computer usage monitoring utility as claimed in claim 1, wherein the utility comprises means for checking for an active window at periodic callback intervals, and for marking an idle indicator if user activity is below a threshold.
6. A computer usage monitoring utility as claimed in claim 5, wherein the utility comprises means for generating an event record at a callback interval when either a frame time period expires or when an active application changes, whichever is earlier.

7. A computer usage monitoring utility as claimed in claim 5, wherein the utility comprises means for determining usage data according to a captured number of actions of user input devices such as a keyboard and a mouse.
- 5 8. A computer usage monitoring utility as claimed in claim 5, wherein the utility comprises means for incrementing an idle count at periodic intervals if an input device is inactive and for marking a window as idle when the count reaches a threshold.
- 10 9. A computer usage monitoring utility as claimed in claim 5, wherein the utility comprises means for maintaining a temporary list of applications associated with windows previously identified, for retrieving an application name for a window if the window is present in the list, and for interrogating the operating system to determine the application name if the window is not in the list.
- 15 10. A computer usage monitoring utility as claimed in claim 9, wherein the utility comprises means for searching in an operating system for an opened process with a name indicating that it is an executable associated with a window.
- 20 11. A computer usage monitoring utility as claimed in claim 1, wherein the utility comprises means for capturing an active URL if the active application is a browser.
- 25 12. A computer usage monitoring utility as claimed in claim 1, wherein the utility comprises an authorised stop program for closing the utility for purposes such as upgrade.
- 30 13. A computer usage monitoring utility as claimed in claim 12, wherein the stop program comprises means for creating a stop mutex, and the utility comprises means for closing down in an orderly manner if the mutex is opened.

14. A computer usage monitoring utility as claimed in claim 12, wherein the utility comprises a listener thread for listening for a mutex at periodic intervals.
15. A computer usage monitoring utility as claimed in claim 1, wherein the utility comprises a protection program comprising means for executing in parallel to a main program implementing monitoring functions, both the main program and the protection program comprising means for determining if the other has stopped executing, and for re-starting it if it has stopped executing.
16. A computer usage monitoring utility as claimed in claim 15, wherein both the main program and the protection program open a mutex and comprise means for detecting existence of the mutex of the other to determine if the other is executing.
17. A computer usage monitoring utility as claimed in claim 15, wherein the utility comprises a second protection program comprising means for re-activating the main program or the first protection program if either stops operating and for terminating itself when it has finished execution.
18. A computer usage monitoring utility as claimed in claim 15, wherein the main program comprises means for writing an alert to a log file if a protection program is terminated.
19. A computer usage monitoring utility as claimed in claim 1, wherein the utility comprises a live transfer mechanism for automatic transfer of event records to a server in real time.

20. A computer usage monitoring utility as claimed in claim 19, wherein the utility further comprises a triggered event mechanism comprising means for triggering an alert message if alert usage conditions are met.
- 5 21. A computer usage monitoring utility as claimed in claim 20, wherein an alert condition is set according to a user profile.
22. A computer usage monitoring utility comprising means for operating as a background application transparently to a user to capture usage data
10 indicating usage of the computer, wherein:
- the utility comprises means for recording usage data in discrete events, in which there is an event at expiry of a periodic frame interval or when a used application changes, whichever is earlier, and the utility comprises means for
15 activating a callback process at periodic intervals to check for either of said two conditions exist, and
- the utility comprises means for automatically determining a productivity classification for each event.
- 20 23. A computer program product comprising software code portions for providing a utility as claimed in any preceding claim when executing on a digital computer.